

Job Risk Analysis																		
Name(s) of Risk Team Members: P. Cirnigliaro				Point Value → Parameter ↓		1		2		3		4		5				
Job Title: Biological Material Work Job Number or Job Identifier: JRA 11b-05				Frequency (B)		≤once/year		≤once/month		≤once/week		≤once/shift		>once/shift				
Job Description: Cell Work at NSRL				Severity (C)		First Aid Only		Medical Treatment		Lost Time		Partial Disability		Death or Permanent Disability				
Training and Procedures List (optional): C-A Radiobiology Training				Likelihood (D)		Extremely Unlikely		Unlikely		Possible		Probable		Multiple				
Approved by: <i>E. Lessard</i> Date: 4/7/054 Rev. #: 0																		
Stressors (if applicable, please list all):				Reason for Revision (if applicable): Date added.						Comments:								
				Before Additional Controls										After Additional Controls				
Job Step / Task	Hazard	Control(s)	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction		
Transport by vehicle animal samples to and from Medical/.Biology Dept. to NSRL	Highway accident	Training and compliance with BNL’s traffic safety rules, BNL onsite Transfer/Safety Assessment.	Y	1	2	3	3	18										
Remove biological materials from transport vehicle.	Falls on same level	Proper footwear, housekeeping.	N	1	2	3	3	18										
Store biological material in incubators	Use of compressed CO ₂ bottles.	Compressed gas awareness training in C-A Radiobiology training, work area ventilation.	N	1	2	2	3	12										
Prepare biological materials for exposure.	Chemical exposure	Work Planning, Experiment Safety Reviews, use of local ventilation, use of PPE.	N	1	2	3	3	18										
Prepare biological materials for exposure.	Exposure to biological materials.	Work Planning, Experiment Safety Reviews, use of local ventilation, use of PPE.	N	1	2	1	2	4										
Transport biological materials from C lab to NSRL target room	Ionizing radiation exposure	Work planning, Training, Access Control System, RWP.	N	1	2	1	2	4										

Remove biological materials from target room to C lab.	Ionizing radiation exposure from activation products	Work planning, Access Control System, RWP.	N	1	2	1	2	4								
Manipulation of biological materials after radiation exposure.	Ionizing radiation exposure from activation products	Allow for decay before manipulation of materials, work planning, Access Control System, RWP.	N	1	2	1	1	2								
Manipulation of biological materials after radiation exposure.	Chemical exposure	Use of PPE, use of local ventilation, allow for decay before manipulation of materials, work planning, Access Control System, RWP.	N	1	2	3	3	18								
Further Description of Controls Added to Reduce Risk:																
*Risk:	0 to 20		21 to 40			41-60				61 to 80				81 or greater		
	Negligible		Acceptable			Moderate				Substantial				Intolerable		